

IN THE CLAIMS:

Please amend Claims 1, 6, 8-9, 11, 15-16, 18-19, 21-26 and 28-29 as follows:

1. [Amended] An apparatus for terminating an obstructive sleep apnea event before cessation of breathing occurs, wherein the apparatus comprises:

at least one microphone capable of being acoustically associated with a person, said microphone capable of detecting breathing sounds within an airway of said person and capable of generating signals representative of said breathing sounds;

a controller coupled to said at least one microphone and capable of receiving said signals, said controller capable of identifying within said signals at least one signal pattern that is associated with a breathing pattern of said person that occurs at the onset of an obstructive sleep apnea event before cessation of breathing occurs, and capable of generating an alarm signal in response thereto;

and

a stimulus generator coupled to said controller, said stimulus generator capable of receiving said alarm signal from said controller, and in response thereto, creating a stimulus to cause said person to move in a manner that causes said obstructive sleep apnea event to terminate before cessation of breathing occurs.

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6. [Amended] An apparatus as claimed in Claim 1 further comprising at least one
2 filter coupled between said at least one microphone and said controller, wherein said at least one
3 filter is capable of filtering said signals from said at least one microphone to create filtered signals
4 representative of said breathing sounds, and wherein said controller is capable of identifying within
5 said filtered signals at least one signal pattern that is associated with a breathing pattern of said
6 person that occurs at the onset of an obstructive sleep apnea event before cessation of breathing
7 occurs.

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8. [Amended] The apparatus as claimed in Claim 1 wherein said controller comprises
2 software capable of analyzing said signals to identify within said signals at least one signal pattern
3 that is associated with a breathing pattern of said person that occurs at the onset of an obstructive
4 sleep apnea event before cessation of breathing occurs.

1 9. [Amended] The apparatus as claimed in Claim 8 wherein said software analyzes
2 said signals using Fast Fourier Transform analysis to identify at least one signal pattern that is
3 associated with a breathing pattern of said person that occurs at the onset of an obstructive sleep
4 apnea event before cessation of breathing occurs.

1 AS 11. [Amended] An apparatus for terminating an obstructive sleep apnea event before
2 cessation of breathing occurs, wherein the apparatus comprises:

3 at least one microphone capable of being acoustically associated with a person, said
4 microphone capable of detecting breathing sounds within an airway of said person and capable of
5 generating signals representative of said breathing sounds;

6 a controller coupled to said at least one microphone and capable of receiving said signals,
7 said controller capable of identifying within said signals at least one signal pattern that is associated
8 with a partially occluded breathing pattern of said person that occurs at the onset of an obstructive
9 sleep apnea event before cessation of breathing occurs, and capable of generating an alarm signal
10 in response thereto; and

11 a stimulus generator coupled to said controller, said stimulus generator capable of receiving
12 said alarm signal from said controller, and in response thereto, creating a stimulus to cause said
13 person to move in a manner that terminates the partial occlusion of breathing and restores normal
14 breathing.

1 *At* 15. [Amended] An apparatus as claimed in Claim 11 further comprising a base station
2 coupled to said controller wherein said controller is capable of sending an alarm signal to said base
3 station to indicate that at least one signal pattern has been identified that is associated with a partially
4 occluded breathing pattern of said person that occurs at the onset of an obstructive sleep apnea event
5 before cessation of breathing occurs.

1 16. [Amended] An apparatus as claimed in Claim 11 further comprising at least one
2 filter coupled between said at least one microphone and said controller, wherein said at least one
3 filter is capable of filtering said signals from said at least one microphone to create filtered signals
4 representative of said breathing sounds, and wherein said controller is capable of identifying within
5 said filtered signals at least one signal pattern that is associated with a partially occluded breathing
6 pattern of said person that occurs at the onset of an obstructive sleep apnea event before cessation
7 of breathing occurs.

1 *17* 18. [Amended] The apparatus as claimed in Claim 11 wherein said controller
2 comprises software capable of analyzing said signals to identify within said signals at least one signal
3 pattern that is associated with a partially occluded breathing pattern of said person that occurs at
4 the onset of an obstructive sleep apnea event before cessation of breathing occurs.

1 ^{A7}_{Amended} 19. [Amended] The apparatus as claimed in Claim 18 wherein said software analyzes
2 said signals using Fast Fourier Transform analysis to identify at least one signal pattern that is
3 associated with a partially occluded breathing pattern of said person that occurs at the onset of an
4 obstructive sleep apnea event before cessation of breathing occurs.

1 ⁴⁸ 21. [Amended] A method for terminating an obstructive sleep apnea event before
2 cessation of breathing occurs, comprising the steps of:
3 detecting breathing sounds within an airway of a person;
4 generating signals representative of said breathing sounds;
5 identifying within said signals at least one signal pattern that is associated with a breathing
6 pattern of said person that occurs at the onset of an obstructive sleep apnea event before cessation
7 of breathing occurs; and
8 creating a stimulus to cause said person to move in a manner that causes said obstructive
9 sleep apnea event to terminate before cessation of breathing occurs.

1 AS 22. [Amended] The method as claimed in Claim 21 wherein said step of creating a
2 stimulus to cause said person to move in a manner that causes said obstructive sleep apnea event to
3 terminate before cessation of breathing occurs comprises one of the steps of:

4 generating a sound with a sound generator, activating a light source to turn on a light,
5 activating a vibrator, and generating an electrical current through the body of said person.

1 23. [Amended] The method as claimed in Claim 21 wherein said step of creating a
2 stimulus to cause said person to move in a manner that causes said obstructive sleep apnea event to
3 terminate before cessation of breathing occurs comprises the steps of:

4 activating a vibrator; and
5 generating a sound with a sound generator.

1 24. [Amended] The method as claimed in Claim 21 wherein said step of creating a
2 stimulus to cause said person to move in a manner that causes said obstructive sleep apnea event to
3 terminate before cessation of breathing occurs comprises the steps of:

4 activating a vibrator; and
5 generating an electrical current through the body of said person.

1 *AS* 25. [Amended] The method as claimed in Claim 21 further comprising the steps of:
2 filtering said signals representative of said breathing sounds to create filtered signals
3 representative of said breathing sounds; and
4 identifying within said filtered signals at least one signal pattern that is associated with a
5 breathing pattern of said person that occurs at the onset of an obstructive sleep apnea event before
6 cessation of breathing occurs.

1 26. [Amended] The method as claimed in Claim 21 further comprising the steps of:
2 recording said at least one signal pattern that is associated with a breathing pattern of said
3 person that occurs at the onset of an obstructive sleep apnea event before cessation of breathing
4 occurs;
5 monitoring said signals representative of said breathing sounds as said person breathes;
6 comparing said signals representative of said breathing sounds with said recorded at least one
7 signal pattern that is associated with a breathing pattern of said person that occurs at the onset of an
8 obstructive sleep apnea event before cessation of breathing occurs; and
9 identifying within said signals a signal pattern that is substantially the same as said recorded
10 at least one signal pattern that is associated with a breathing pattern of said person that occurs at the
11 onset of an obstructive sleep apnea event before cessation of breathing occurs.

1 A9 28. [Amended] A method for terminating an obstructive sleep apnea event before
2 cessation of breathing occurs comprising the steps of:
3 detecting breathing sounds within an airway of a person;
4 generating signals representative of said breathing sounds;
5 identifying within said signals at least one signal pattern that is associated with a partially
6 occluded breathing pattern of said person that occurs at the onset of an obstructive sleep apnea event
7 before cessation of breathing occurs;
8 recording said at least one signal pattern that is associated with a partially occluded breathing
9 pattern of said person that occurs at the onset of an obstructive sleep apnea event before cessation
10 of breathing occurs;
11 monitoring said signals representative of said breathing sounds as said person breathes;
12 comparing said signals representative of said breathing sounds with said recorded at least one
13 signal pattern that is associated with a partially occluded breathing pattern of said person that occurs
14 at the onset of an obstructive sleep apnea event before cessation of breathing occurs;
15 identifying within said signals a signal pattern that is substantially the same as said recorded
16 at least one signal pattern that is associated with a partially occluded breathing pattern of said person
17 that occurs at the onset of an obstructive sleep apnea event before cessation of breathing occurs; and
18 creating a stimulus to cause said person to move in a manner that terminates the partial
19 occlusion of breathing and restores normal breathing.

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2 *control* 29. [Amended] A method for terminating an obstructive sleep apnea event before
3 cessation of breathing occurs comprising the steps of:
4 detecting breathing sounds within an airway of a person;
5 generating signals representative of said breathing sounds;
6 identifying within said signals at least one signal pattern that is associated with a normal
7 breathing pattern of said person;
8 recording said at least one signal pattern that is associated with a normal breathing pattern
9 of said person;
10 monitoring said signals representative of said breathing sounds as said person breathes;
11 comparing said signals representative of said breathing sounds with said recorded at least one
12 signal pattern that is associated with a normal breathing pattern of said person;
13 identifying within said signals a signal pattern that is substantially different from said
14 recorded at least one signal pattern that is associated with a normal breathing pattern of said person;
15 and
creating a stimulus to cause said person to move in a manner that restores normal breathing.
